

# Automotive Technology 6<sup>th</sup> Edition

## Chapter 18 – Gasoline Engine Operation, Parts, and Specifications

### Lesson Plan

#### **CHAPTER SUMMARY:**



1. Energy and Power, engine construction overview, engine parts and systems
  2. Four-stroke cycle operation and engine classification and construction
  3. Engine measurement and compression ratio
  4. Torque and horsepower
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#### **OBJECTIVES:**



1. Discuss engine construction, the engine's purpose and function, energy and power, and engine construction.
  2. Explain engine parts and systems.
  3. Explain four-stroke cycle operation.
  4. Discuss engine classification and construction.
  5. Explain engine measurement.
  6. Discuss compression ratio, torque, and horsepower.
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**RESOURCES:** (All resources may be found at <http://www.jameshalderman.com>) Internet access required to hyperlink.



1. **Task Sheet ASE (A1-A-2) P-1:** Gasoline Engine Identification
  2. **Task Sheet ASE (A1-A-2) P-1:** General Engine Specification
  3. **Task Sheet ASE (A1-D-6) P-1 (MLR only):** Lubrication & Cooling System Components
  4. Chapter PowerPoint
  5. Chapter Crossword Puzzle and Word Search
  6. Videos: [\(A1\) Engine Repair Videos](#)
  7. Animations: [\(A1\) Engine Repair Animations](#)
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#### **ACTIVITIES:**



1. **Task Sheet ASE (A1-A-2) P-1:** Have students complete Gasoline Engine Identification Task Sheet
  2. **Task Sheet ASE (A1-A-2) P-1:** Have students complete General Engine Specification Task Sheet
  3. **Task Sheet ASE (A1-D-6) P-1 (MLR only):** Have students complete Lubrication & Cooling System Components Task Sheet
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#### **ASSIGNMENTS:**



1. Chapter crossword and word search puzzles.
  2. Complete end of chapter 10 question quiz.
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**CLASS DISCUSSION:**

1. Review and group discussion chapter Frequently Asked Questions and Tech Tips sections.
  2. Review and group discussion of the five (5) chapter Review Questions.
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**NOTES AND EVALUATION:**

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